

Background:

- Oregon found high levels of cadmium and arsenic based on a moss study by the USFS
- They deployed ambient monitors (including one directly next to Bullseye Glass, where the highest moss metal concentrations had been).
- The monitor near Bullseye Glass registered values for Arsenic 158 times the Oregon health benchmark and 49 times the cadmium benchmark. Total chromium was 894 times the benchmark for hexavalent chromium (the analysis did not speciate chromium). Even if only a small fraction is hex chrome (a very toxic pollutant), then the measured ambient value would be many times the Oregon health benchmark. Due to the toxicity of hexavalent chromium, this could represent a public health concern.
- We do not have monitoring directly adjacent to any other glass facilities at this time. We know that the largest art glass manufacturer in the country is located in Woodinville, WA (Spectrum Glass).
- Oregon is leading the effort and has been busy with public meetings and health issues.
- Many EPA staff are engaged in R10, OECA, and OAR to understand and digest this issue.

Sources identified

- Bullseye Glass – Portland, OR
- Uroboros Glass – Portland, OR
- Spectrum Glass – Woodinville, WA
- Others nationally – <10 other big ones – Reached out to R5 and need to reach out to others. Specifically know that there are large plants in Ohio and West Virginia.

Source specific Work

- Bullseye and Uroboros have voluntarily stopped using any cadmium or arsenic (Uroboros was already not using arsenic). However, both use hexavalent chromium as a colorant and have not stopped use since it has not been highlighted like the other compounds.
- DEQ and EPA have inspected Bullseye and Uroboros (EPA on 2/10 and 2/11). We hope to inspect Spectrum next week
- We are evaluating compliance with all applicable requirements and reviewing applicability determinations and interpretations

- **Ex. 5 - Deliberative Process**

Monitoring Work

- EPA is overnighting two ambient air monitors to Oregon. They are also deploying monitors to get further data on air emissions over longer periods and at different locations.
- We have worked with DEQ to try to ensure that the monitors can speciate the chromium so that we can determine the hexavalent fraction.
- We should strongly consider monitoring at Woodinville.

Outreach

EPA Briefing on Bullseye and other art glass facilities 2-11-16

- DEQ is taking the lead on all outreach
- EPA was not mentioned by the public or DEQ during the public meeting.
- We have produced a desk statement.